

OPzS2-1000(2V1000Ah)

RITAR®

Ritar OPzS series is flooded Lead Acid battery that adopts Tubular Plate technology to offer high reliability and performance. The Battery is designed and manufactured according to standards and with DIN40736-2/IEC60896-11 positive spine and patent formula of die-casting active material. OPzS series exceeds standard values with more DIN40736-2/IEC60896-11 than 20 years floating design even more suitable for life at 25°C and is cyclic use(PV/solar, traction etc) under extreme operating conditions.

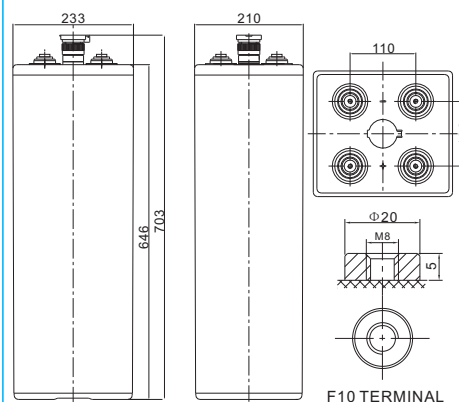
Specification

Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	1000Ah@10hr-rate to 1.85V per cell @25°C
Weight	Without Electrolyte 57.8 kg/With Electrolyte 78.0kg
Internal Resistance	Approx. 0.28 mΩ
Terminal	F10(M8)
Max. Discharge Current	3800A (5 sec)
Design Life	20 years (floating charge)
Maximum Charging Current	125.0 A
Reference Capacity	C24 1197.0AH C48 1346.6AH C72 1414.0AH C100 1446.4AH C120 1475.3AH C240 1500.0AH
Float Charging Voltage	2.23 V~2.25 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.40 V~2.45 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -15°C~50°C Charge: 0°C~40°C Storage: -15°C~50°C
Normal Operating Temperature Range	25°C±5°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3.5% at 25°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



Dimensions

Unit: mm



Length	233±1mm (9.17 inches)
Width	210±1mm (8.27 inches)
Height	646±1mm (25.4 inches)
Total Height	703±1mm (27.7 inches)
Torque Value	10~12 N*m

Constant Current Discharge Characteristics : A(25°C)

F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	532.1	421.8	297.4	226.7	179.6	158.3	139.7	109.0	93.45	49.06
1.87V	594.8	465.0	319.0	241.3	189.5	167.8	148.1	114.1	97.65	51.27
1.83V	681.3	519.1	346.1	258.1	199.5	173.7	153.3	119.2	101.9	53.47
1.80V	757.1	562.4	359.1	265.7	203.5	178.5	157.5	122.2	105.0	55.13
1.75V	843.6	602.4	375.3	274.2	206.9	182.1	160.7	124.3	107.1	56.23
1.70V	930.1	621.9	386.1	280.7	210.5	184.5	162.8	125.3	108.2	56.78
1.65V	959.3	660.8	399.1	287.7	213.5	186.8	164.9	126.3	109.2	57.33
1.60V	1000	683.5	414.2	297.4	219.5	189.2	167.0	127.3	110.3	57.88

Constant Power Discharge Characteristics : WPC(25°C)

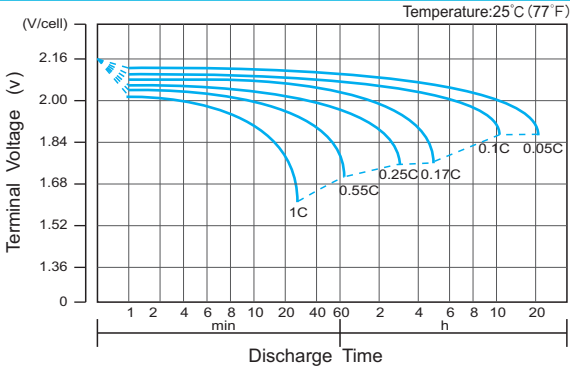
F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	1018	809.7	575.0	440.8	351.4	311.7	276.2	218.0	190.5	100.0
1.87V	1121	879.3	609.8	466.1	370.4	329.2	291.9	227.1	198.6	104.3
1.83V	1255	958.7	648.9	492.6	388.3	339.6	301.4	235.3	205.7	108.0
1.80V	1372	1023	670.6	505.7	395.7	348.4	308.7	240.4	210.8	110.7
1.75V	1488	1068	692.4	517.5	401.0	355.6	314.0	243.4	213.9	112.3
1.70V	1596	1079	709.8	528.3	407.3	359.2	317.1	245.5	215.9	113.4
1.65V	1623	1127	729.3	539.3	412.6	362.9	320.3	247.5	216.9	113.9
1.60V	1642	1162	746.7	552.6	423.2	364.5	322.4	248.5	218.0	114.4

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

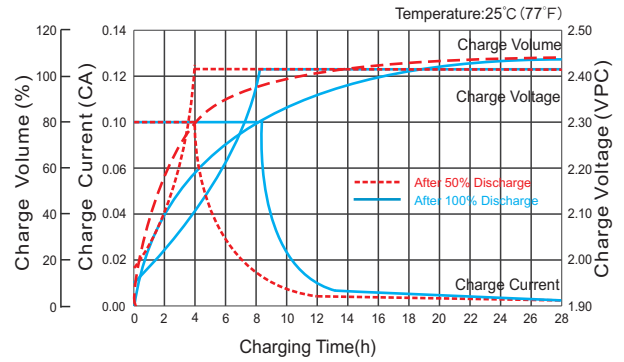
OPzS2-1000(2V1000Ah)



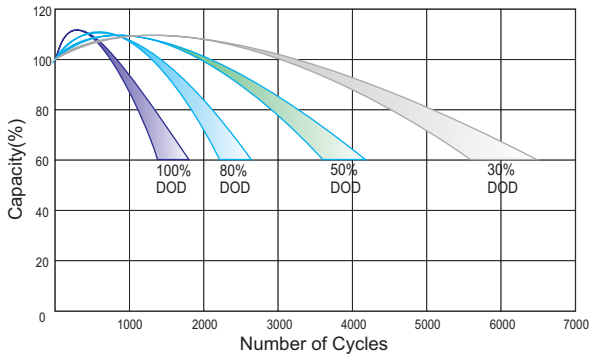
Discharge Characteristics Curve



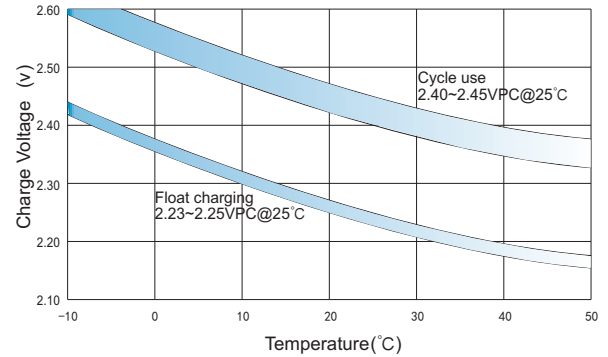
Charge Characteristic Curve for Cycle Use(IU)



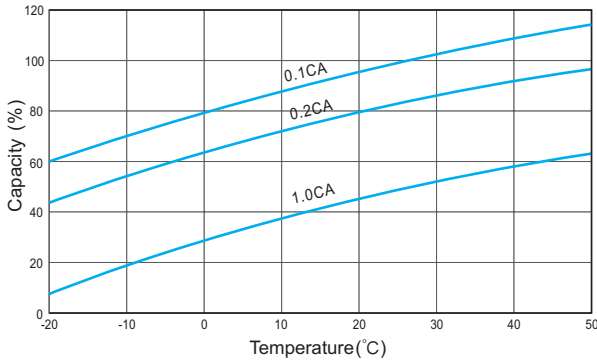
Cycle Life in Relation to Depth of Discharge



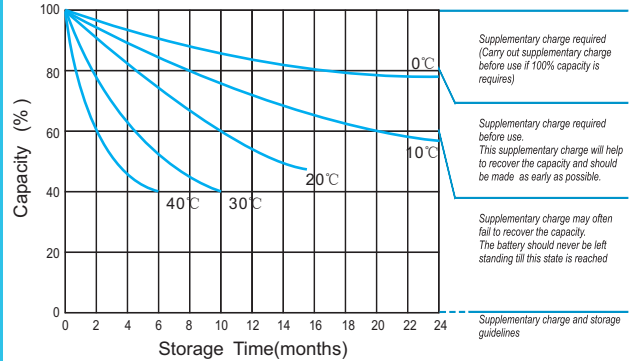
Relationship Between Charging Voltage and Temperature



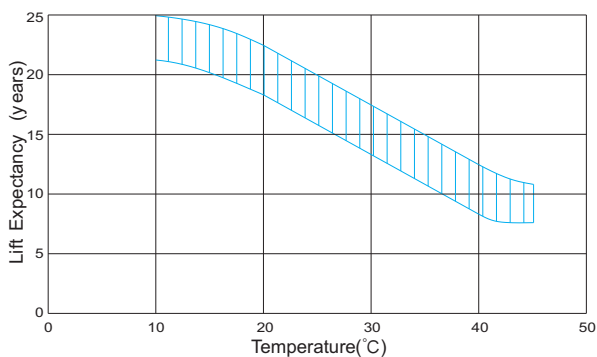
Temperature Effects on Capacity



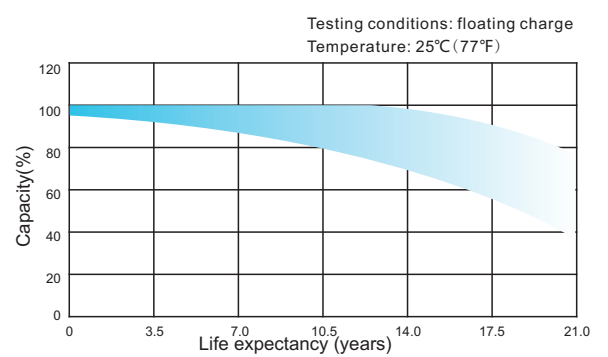
Storage Characteristics



Effect of Temperature on Long Term Life



Life Characteristics Of Standby Use



For Battery Sales + EPA Battery Recycling and AC / DC Power Services, please contact:

Moore & Moore Solutions, Inc.
Phone: 484-302-7009
Email: mr@mooreu.com
www.MooreU.com